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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,795	10/24/2003	Robert Shih	15436.247.1.1	9310
22913	7590	08/09/2007		
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			EXAMINER AKANBI, ISIAKA O	
			ART UNIT 2886	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/693,795

Applicant(s)

SHIH ET AL.

Examiner

Isiaka O. Akanbi

Art Unit

2886

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Amendment***

The amendment filed on 15 May 2007 has been entered into this application.

### ***Terminal Disclaimer***

The terminal disclaimer filed on 15 May 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending Application No. 10/693,773 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to how "arm is adapted to apply pressure between said cap and said header" perform the function of the invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 9, 11-14 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimura et al. (5,666,450).

As regard to claim 1, Fujimura discloses a packaged optical device comprising of the following:

a header (3/110) having a base plate, a photonic device (16) mounted to said header, said photonic device having a first optical axis (laser axis) and a cap (5/85/115) mounted to said header (3/110)(figs. 2 and 16), said cap comprising a body (5 and 3) and a lens (6/114), having a second optical axis (lens axis), mounted to said body, said cap (5/85/115) being mounted to said header (3) by at least one weld point as said lens is positioned relative to said photonic device (1) so that said first optical axis and said second optical axis are approximately aligned (figs. 1, 17 and 18)(col. 2, line 5-7)(col. 2, line 33-35).

As to claim 2, according to claim 1, Fujimura discloses photonic device is a laser (1)(figs. 1 and 2)(col. 1, line 53-55)(col. 2, line 44-46)

As to claim 3, Fujimura discloses photonic device is a photo diode (2)(col. 2, line 28 and line 49-50).

As to claim 5, Fujimura discloses a ball lens (6)(figs. 1 and 2)

As to claim 6, Fujimura discloses an optical detector (2).

As regard to claim 7, Fujimura discloses a method of aligning a cap (5/85/115) having a lens (6) to a header (3) holding a photonic device, the method comprising:

a step for viewing (PSD)(col. 8, line 55-65) said photonic device (1)(laser beam) through said lens (6), a step for moving said cap (fig. 18) relative to said header to position a first optical axis of said lens proximate a second optical axis of said photonic device and a step for mounting said cap to said header to hold said cap in alignment with said photonic device (figs. 1 and 2)(see abstract)(col. 1, line 52-55)(col. 2, line 39-66).

As to claim 9, Fujimura discloses a step for viewing photonic device by a video display system (col. 8, line 55-65).

As to claims 11 and 12, Fujimura discloses a step for moving said cap relative to said header until a center of said lens is within a preselected calibration distance of said photonic device, a step for positioning said header for movement in at least two of an x- direction, a y- direction, and a z-direction, a step for positioning said cap for movement in at least two of an x- direction, a y-direction, and a z-direction, and a step for moving at least one of said header and said cap in at least one of an x-direction, a y-direction, and a z-direction (figs. 2 and 10)(col. 2, line 39-col. 3, line 1-5)(col. 14, line 25-30).

As to claim 13, Fujimura discloses a step for welding said cap to said header at at least one point (figs. 1 and 2)(col. 2, line 5-7).

As regard to claim 14, Fujimura discloses an apparatus to align a cap having a lens with a first optical axis to a header holding a photonic device with a second optical axis comprising of the following:

a capture assembly (16) adapted to hold said header (3) having said photonic device (1), said capture assembly being movable relative to said cap (the body supporting laser)(col. 18, line 48-51)(figs. 2, 10 and 17);

an arm (15/96/123/122) configured to support said cap, said arm being adapted to support said cap without obstructing a view of at least a portion of said lens (6/114) and

a visual display system (PSD)(col. 8, line 55-65)(fig. 11) adapted to depict a position of said cap relative to said photonic device (fig. 5) as said capture assembly moves relative to said cap to align said first optical axis (laser axis) and said second optical axis (lens axis)(figs. 2 and 10)(col. 2, line 39-col. 3, line 1-5)(col. 14, line 25-30).

As to claim 16 Fujimura discloses at least one welding system, said at least one welding system in electrical communication with said arm and said capture assembly (figs. 1-2,10,15,16)(col. 2, line 5-42)(col. 13, line 55-57).

As to claim 17 Fujimura discloses at least one camera and at least one video display (col. 8, line 55-65).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,666,450).

As to claims 4 and 8, Fujimura fails to specify the specific type of sealing/joining/welding process use.

Fujimura show a cap in (fig. 2) that is (i.e. join/weld to base plate of a header (3), however, since he does not limit the type of sealing/joining/welding process to be used, it would have been at least obvious to one having ordinary skill in the art at to use hermetic sealing/join metallicity a header to a cap since this is a known ways of sealing/joining in the art.

Therefore it would have been at least obvious to one having ordinary skill in the art at the time of invention was made to use a hermetic seal to join a cap to base plate header for the purpose of achieving the predictable results of permanently welding the header and the cap.

Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,963,696) in view of Staver et al. (5,621,831).

As to claims 10 and 19, Fujimura fails to specify a step for overlaying a calibration pattern on said video display.

Fujimura discloses the use of at least one video display (i.e. screen)(col. 8, line 55-65).

Staver teaches of visual display system that includes a video overlay including at least one calibration feature (fig. 3)(col. 5, line 4-30).

Therefore it would have been at least obvious to one having ordinary skill in the art at the time of invention was made to substitute one method for the other to achieve the predictable result of aiding a person to align accurately laser to fiber alignment.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,963,696 in view of the examiner Official Notice.

As to claim 18, the reference of Fujimura teaches of an optical assembly comprising camera (CCD)(col. 8, line 55-65), however the reference of Fujimura is silent with regard to said camera further comprising a zoom lens. The examiner wishes to take Official Notice of the fact that the use of a camera with zoom lens would have been well known as evident by Mazumder et al. (5,446,549). It would have been obvious to one having ordinary skill in the art at the time of invention to provide a camera comprising a zoom lens for the purpose of zoom in or out camera to obtain a better image of the alignment.

### ***Response to Arguments***

Applicant's arguments/remarks, see pages 12-14, filed on 15 May 2007, with respect to the rejection(s) of claim(s) 1-19 under 35 U.S.C. 112, first par., Double Patenting, 35 U.S.C. 102(b) and 35 U.S.C. 103(a) have been fully considered.

Applicant's arguments, with respect to the rejection(s) under Double Patenting are persuasive. Therefore Double Patenting rejection(s) has been withdrawn.

However applicant's arguments, with respect to the rejection(s) of claim(s) under 35 U.S.C. 112, first par., 35 U.S.C. 102(b) and 35 U.S.C. 103(a) are not persuasive.

In response to Applicant's arguments of rejection of claim 15 under 35 U.S.C. 112, first par., on the grounds that it contains "subject matter which was not described in the specification in such a way as to how 'arm is adapted to apply pressure between said cap and said header' perform the function of the invention", the examiner disagrees with the applicant arguments, that the specification lack adequate description or support as to how said arm is adapted to apply pressure between said cap and said header that is (i.e. join/weld) as show in (figs. 1, 3 and 9). Therefore the rejection of claim 15 is maintained.

Further, In response to Applicant's arguments that the examiner has not shown that Fujimura teaches or suggests the aforementioned limitation of claim 1, it is respectfully pointed out to applicant that this argument is not persuasive as Fujimura clearly disclose in (col. 2, line 5-7)(col. 2, line 33-35) and shows in (figs. 1, 17 and 18) these limitations.

Additionally, as to applicant arguments that cited reference Fujimura does not show claims 7 and 14 limitation, the examiner disagrees with the applicant arguments, that Fujimura discloses in (col. 1, line 52-55)(col. 18, line 43-51) and shows in (figs. 2, 10 and 17) these limitations. As such, the claims are still rejected as shown in the detail above.

Finally, as to applicant arguments, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or



modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine would have been obvious to one having ordinary skill in the art at the time of invention to combine Fujimura and Staver in order to achieve the predictable result of aiding a person to align accurately laser to fiber alignment. Further, since the applicant has not argued the examiner's position about the "official Notice" in the previous Official action. The applicant has acquiesced.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner

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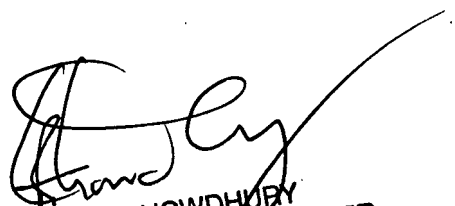
can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on (571) 272-2287. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi

August 4, 2007



TARIFUR CHOWDHURY  
SUPERVISORY PATENT EXAMINER